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## The Project Y Spies

Alan Carr

A talk on the subject of the various spies that were present at Los Alamos during the Manhattan Project.



LOS ALAMOS  
PROJECT  
MAIN GATE  
PASSES MUST BE  
PRESENTED TO  
GUARDS

# NATIONAL SECURITY RESEARCH CENTER







# The Project Y Spies

An Historical Perspective on a Perennial Threat

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 RESEARCH  
CENTER

I ♥  
NY<sup>®</sup>  
EDITION!

Alan B. Carr  
Senior Historian



# Hollywood Spies are Easy to Identify





# But What About Real Spies?

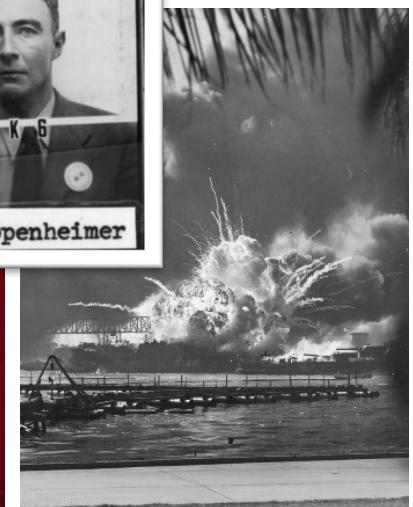
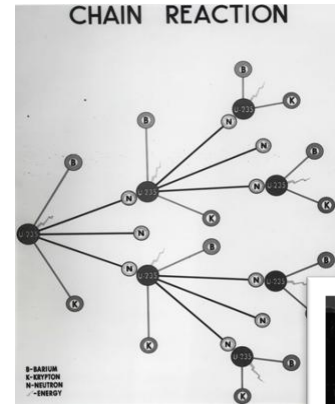




# The Race for the Atomic Bomb



- Fission was first produced in Nazi Germany in 1938
- Einstein and Szilard warned President Roosevelt in August 1939
- On September 1, 1939 Germany invaded Poland
- Imperial Japan attacked Pearl Harbor on December 7, 1941
- Los Alamos, led by J. Robert Oppenheimer, held its first major technical conference in April 1943
- Two types of atomic bombs were completed in ~28 months
- The world's first nuclear test was conducted on July 16, 1945: Trinity
- It achieved a yield equivalent to 21,000 tons of TNT





# The End of World War II

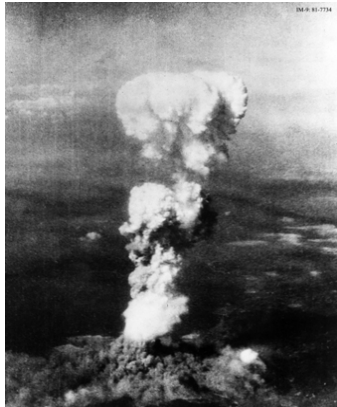


- Hiroshima was attacked on August 6, 1945; ~ 64,500 deaths by mid-November 1945
- The Soviet Union declared war on Japan August 8<sup>th</sup>; invaded Manchuria on the 9<sup>th</sup>
- Nagasaki was bombed on August 9<sup>th</sup>; 39,214 deaths by mid-November 1945
- An armistice was declared on August 14<sup>th</sup>
- Los Alamos received the Army-Navy “E” Award on October 16<sup>th</sup>



“The group [of Japanese diplomats in Switzerland] believes that the atomic bomb, not the Soviet entry into the war in the Pacific, caused the Japanese offer to surrender.”

– Walter J. Donovan (OSS Director) to President Harry S. Truman, August 14<sup>th</sup>





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# But meanwhile, behind the scenes...





# The Boy Genius: Ted Hall



Form B

THIS DOCUMENT CONSISTS OF 1 PAGE(S)  
TO 2 OF 2 COPIES, SERIES A

**UNCLASSIFIED**

NAME: Hall, Theodore A. (PFC)  
Last First Middle Initial

PLACE OF BIRTH: New York City  
State or Country: N.Y. State

DATE OF BIRTH: 10/20/25

PLACE WHICH YOU REGARD AS YOUR "HOME TOWN": New York City

EDUCATION:

COLLEGE OR UNIVERSITY	DEGREE RECEIVED	YEAR OF
Harvard	B.S.	1944

PERMANENT POSITION which the person left to work on the project:

FIRM OR INSTITUTION	TITLE

CONTRIBUTION: (Brief one-line description of his work in project in simple, non-technical language)  
Work in experimental nuclear physics of U-235 from .4 to 2.5 MEV, transmutation of various substances

DATE: 6/14/45

SIGNATURE: Theodore A. Hall

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LAW Group

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PER DOC REVIEW JAN. 1973

- Hall was born October 20, 1925 in New York City
- He graduated from Harvard in 1944 at age 18!
- He arrived in Los Alamos January 27, 1944; worked in the Physics Division then the Gadget Division (P-6 to G-6)
- Hall voluntarily shared classified information with the Communist Party of America in October 1944
- Initially, Soviet intelligence was highly suspicious of him
- Likely code-named "MLAD," Hall was the first to provide the Soviets with information directly from Site Y



# The Brilliant Ingrate: Klaus Fuchs



- Fuchs was born December 29, 1911 in Rüsselsheim, Germany
- After Hitler was appointed chancellor of Germany, he fled to Britain
- He completed his PhD at the University of Bristol in 1937
- Fuchs became a British subject in 1942 after a lengthy internment
- He was recruited by Rudolf Peierls, a fellow German refugee, for Britain's atomic bomb program
- Like Hall, Fuchs volunteered to spy
- His code-name was "CHARLES"
- As a senior theoretical physicist, Fuchs had access to very sensitive information



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SCIENTIFIC RESEARCH & DEVELOPMENT PERSONNEL  
(Please PRINT or TYPE. Answer all questions fully. If "None", so indicate. If space is insufficient attach additional sheets as necessary.)

1. NAME: FUCHS Last Klaus First E.J. Middle Initial

2. PRESENT ADDRESS: P. O. Box 1663 No. and Street Santa Fe, City New Mexico State

3. PLACE WHICH YOU REGARD AS YOUR "HOME TOWN": Birmingham, England City State

4. PLACE OF BIRTH: Russelsheim, Germany City State or Country DATE OF BIRTH: Dec. 29, 1911 Month Day Year

6. FAMILY: List the following members of your family, even though deceased:

	NAME	HOME ADDRESS (City & State)	OCCUPATION
FATHER	<u>Paul Fuchs</u>	<u>Berlin, Germany</u>	<u>Prof. of Theology</u>
MOTHER	<u>Elsa Fuchs</u>	<u>deceased</u>	
WIFE	<u>None</u>		
CHILDREN (S)	<u>(S) Gerhard Fuchs</u>	<u>Davos-Platz, Switzerland</u>	<u>Invalid</u>
	<u>(S) Elisabeth Kittowsky</u>	<u>deceased</u>	
	<u>(S) Kristel Heineman</u>	<u>Cambridge, Mass.</u>	<u>housewife.</u>

7. MILITARY SERVICE: List your military service and that of members of your family listed above:

NAME	BRANCH OF SERVICE	DATE OF ENTRY	DATE OF EXIT
<u>None</u>			

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# David Greenglass: Oh Brother!



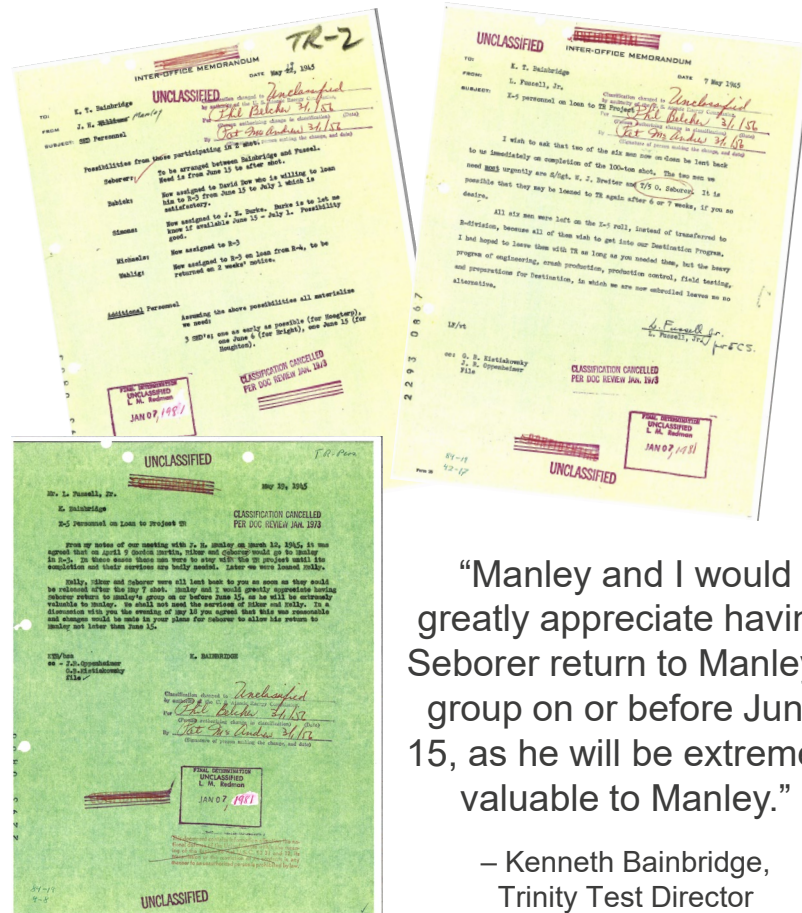
- Greenglass was born March 2, 1922 in **New York City**
- He joined the Young Communist League in 1943 with his wife Ruth; he joined the Army that same year
- He was assigned to the Manhattan Project because of his machinist training
- Greenglass was recruited as a spy by his brother-in-law Julius Rosenberg
- Code-named “KALIBR,” he was a “semi-skilled” Technician 4<sup>th</sup> Class in X-4
- The information Greenglass provided was not particularly useful
- However, it did help corroborate information provided by other spies



# A Godsend: Oscar Seborer



- Seborer was born in (you guessed it!) **New York City** in 1921
- He arrived in very early 1945; a PFC in X-2C, which becomes X-5
- He participated in Project Trinity; he helped with the 100-ton test
- He was promoted to T/5 in the spring and T/4 in the summer
- After the war, he was transferred to Z Division (Z ultimately became Sandia)
- Seborer was almost certainly a spy; his code-name was almost certainly “GODSEND”
- He apparently transferred information to a communist attorney for Amtorg



“Manley and I would greatly appreciate having Seborer return to Manley’s group on or before June 15, as he will be extremely valuable to Manley.”

— Kenneth Bainbridge,  
Trinity Test Director



# Who Was Perseus?



- For decades, there was an alleged wartime spy at Los Alamos code-named PERSEUS
- The evidence of PERSEUS's existence indicates s/he was associated with Morris and Lona Cohen
- Memoirs written by former members of the KGB after the Cold War have alluded to PERSEUS
- Today, supported by VENONA, the prevailing view is that PERSEUS never existed

"But with the opening of the Venona decryptions in 1995, it became clear that Perseus was a Soviet/Russian intelligence disinformation operation to protect Theodore Hall (the real Mlad), then still alive but not publicly exposed as a Soviet spy. The fake Perseus/Mlad was given characteristics that did not fit Hall. There was no Perseus."

– Historians Harvey Klehr and John Earl Haynes



# The Atomic Legacy of the Project Y Spies



- The Soviet Union secretly tested its first atomic bomb on August 29, 1949
- The Soviets had exceptionally talented scientists, but the atomic spies were also very much responsible for RDS-1/Joe-1
- The detailed information acquired through espionage enabled the Soviets to copy the imploding plutonium weapon: Fat Man
- However, information acquired on the H-bomb was of no value

“The whole Soviet people should be deeply grateful to Klaus Fuchs for the vast amount of information he provided Soviet physicists.”

-Yuli Khariton





# Why Does it Matter?



- The atomic spies helped one of *history's most prolific mass murderers* acquire atomic weapons!
- Remember: Stalin enabled Hitler to conquer Western Europe
- In addition to killing millions of his own people, Stalin also invaded and/or annexed the following:
  - Poland, Finland, Bessarabia, Northern Bukovina, Hertza, Latvia, Lithuania, and Estonia
- Soviet acquisition of nuclear weapons prematurely accelerated the arms race
- The U.S. stockpile grew from 13 weapons in 1947 to nearly 1,200 at the time of Stalin's death (1953)



# Exploring Common Threads



- There are some similarities between Hall, Fuchs, Greenglass, and Seborer
- Three were very young soldiers from New York City
- Two were very young soldiers from New York City who were X Division T/4s!
- Each spy was more zealous than knowledgeable
- Each spy refused to acknowledge the absolutely vile nature of the Soviet Union
- Each spy was motivated primarily, if not exclusively, by ideology

**EACH SPY WAS GIVEN ACCESS TO CLASSIFIED INFORMATION!**



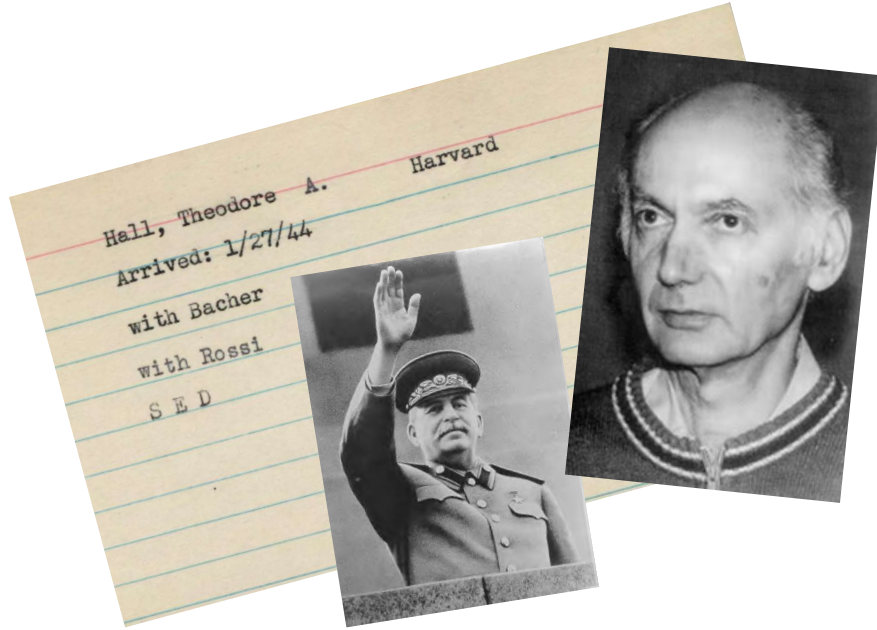




# Epilogue



# The Amateur Without Regrets



"I was indeed mistaken about some things, in particular my view of the nature of the Soviet state. The world has moved on a lot since then, and certainly so have I. But in essence, from the perspective of my 71 years, I still think that brash youth had the right end of the stick. I am no longer that person, but I am by no means ashamed of him." – Ted Hall

- Hall completed his PhD in physics after the war
- He later left physics altogether and became a biologist
- He married and had three daughters
- Intelligence analysts discovered Hall was likely MLAD via the VENONA program and the Vassiliev notebooks
- He was questioned in March 1951, but released to protect VENONA
- Hall admitted he was a spy in 1996
- He claimed fear of a U.S. monopoly motivated him to commit espionage
- Hall died of cancer on Nov. 1, 1999



# Doctor Oblivious



- Fuchs returned to Britain several months after the war
- He stole (essentially useless) information on the hydrogen bomb after the war
- He was identified in 1949 and arrested the following year
- Fuchs confessed to espionage and implicated his courier, Harry Gold, who implicated David Greenglass
- He served 9 years in prison, then immigrated to East Germany in 1959
- Upon his return, he married and became deputy director of a research institute
- Fuchs died January 28, 1988, less than two years before the Berlin wall fell

“It was always my intention, when I had helped the Soviets take over everything, to get up and tell them what is wrong with their system.” – Klaus Fuchs



“I have never before known a person who possesses such a marvelous ability to think in abstract terms who is at the same time so helpless when it comes to either observe or evaluate reality.” – anonymous East German physicist as quoted by Rolf Landshoff

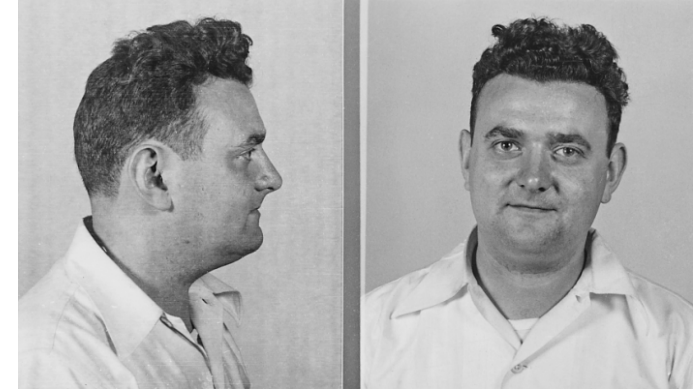
“I can say that I really know America and the West. And I do know that [Soviet nuclear testing] is the only way to curb them.” – Klaus Fuchs



# A Brother Like No Other



- After his arrest in June 1950, Greenglass implicated Julius Rosenberg
- He testified in 1951 that his sister, Julius' wife Ethel, also participated (which she did!)
- In exchange for his testimony, Greenglass only served nine years in prison and the government agreed not to indict his wife
- Julius and Ethel died in the electric chair on June 19, 1953
- After his release, Greenglass lived with his family under an assumed name
- He recanted his testimony in 1996 and falsely claimed his sister was innocent
- On July 1, 2014 Greenglass died with, apparently, no regrets



"As a spy who turned his family in, I don't care. I sleep very well. I would not sacrifice my wife and my children for my sister...You know, I seldom use the word sister anymore; I've just wiped it out of my mind."

- David Greenglass





# The One Who Got Away



**Above:** Klehr and Haynes receive a citation from the CIA for their research. **Left:** Passport photo of Oscar Seborer discovered by The **New York**(!) Times.

- After the war, Seborer obtained an MA in electrical engineering from Michigan
- He was hired by the Navy, but resigned June 1, 1951
- A month later, he fled the country and never returned
- In late summer 1955, an FBI informant became aware of Seborer's espionage
- In 1964, Seborer (who had immigrated to the USSR with his brother) was awarded the Order of the Red Star
- He died April 23, 2015 in Moscow
- Klehr and Haynes broke the story of Seborer's treachery in September 2019





Thank you